

**METHOD AND APPARATUS FOR OPERATIONAL LOW-STRESS
OPTICAL FIBER STORAGE**

A reel for storing optical fiber is disclosed that significantly reduces the
5 torsional force applied to optical fiber as the fiber is being wound onto the reel
for storage. The optical fiber reel comprises two spindles that are offset with
respect to the rotational center of the reel. Such an arrangement causes the
fiber to be wound onto the reel in a substantially linear fashion, thus
preventing the torsional force and resulting twisting that cause micro-cracks to
10 develop. The spindles are of a sufficiently large diameter to facilitate
operational use of the fiber while stored on the spindle without increasing the
attenuation of signals that could result from the use of a smaller diameter
spindle.